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SHAW PITTMAN
IP GROUP
1650 TYSONS BOULEVARD
SUITE 1300
MCLEAN, VA 22102

EXAMINER

AILES, BENJAMIN A

ART UNIT

PAPER NUMBER

2142

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/930,141

Applicant(s)

XU, WEI

Examiner

Benjamin A Ailes

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-64 have been examined.
2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Priority

3. The effective filing date for the subject matter defined in the pending claims in this application is 09/08/2000.

Drawings

4. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-64 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-66 of copending Application No. 09/930,142. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitation of copending Application No. 09/930,141 is overlapping the limitation of copending Application No. 09/930,142.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

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351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-64 are rejected under 35 U.S.C. 102(e) as being anticipated by Conklin et al. (U.S. 5,991,881), hereinafter referred to as Conklin et al.

8. Regarding claim 1, Conklin et al. disclose a method for directing data packets to network applications, the method comprising:

- Receiving a first data packet via a first network interface, the first data packet containing a first data packet service address (col. 7, lines 44-50);
- Identifying a first network application of a plurality of network applications based at least in part on the first network interface and the first data packet service address, the plurality of network applications including a second network application, the first network application being different from the second network application (col. 7, lines 55-61); and
- Sending at least a portion of the first data packet to the first network application (col. 7, lines 55-61).

9. Regarding claim 2, in accordance with claim 1, Conklin et al. disclose the method wherein sending at least a portion of the first data packet to the first network application includes sending at least a portion of the first data packet to the first network application via a second network interface, the second network interface being different from the first network interface (col. 7, lines 44-50).

10. Regarding claim 3, in accordance with claim 1, Conklin et al. disclose the method further comprising:

- Receiving a second data packet via the first network interface, the second data packet containing a second data packet service address (col. 7, lines 44-50);
- Identifying the second network application of the plurality of network applications based at least in part on the first network interface and the second data packet service address (col. 7, lines 51-61); and
- Sending at least a portion of the second data packet to the second network application (col. 7, lines 51-61).

11. Regarding claim 4, in accordance with claim 1, Conklin et al. disclose the method wherein the first network application is a first version of a particular network application and the second network application is a second version of a particular network application (see Fig. 9).

12. Regarding claim 5, in accordance with claim 4, Conklin et al. disclose the method wherein the first version of the particular network application is from a first vendor, the second version of the particular network application is from a second vendor, and the first vendor is different from the second vendor (see Fig. 9).

13. Regarding claim 6, in accordance with claim 4, Conklin et al. disclose the method wherein the particular network application is selected from the group consisting of an intrusion detection application, a virus detection application, a firewall application, a web switch, a network security application, and a load balancing application (col. 1, lines 11-20 and col. 3, lines 36-42).

14. Regarding claim 7, in accordance with claim 1, Conklin et al. disclose the method wherein:

- The first data packet includes a first data packet service port identifier (col. 3, lines 3-6); and
- Identifying a first network application of a plurality of network applications based at least in part on the first network interface and the first data packet service address includes identifying a first network application of a plurality of network applications based at least in part on the first network interface, the first data packet service address, and the first data packet service port identifier (col. 1, lines 11-20 and col. 3, lines 36-42).

15. Regarding claim 8, in accordance with claim 1, Conklin et al. disclose the method wherein:

- The first network application is selected from the group consisting of an intrusion detection application, a virus detection application, a firewall application, a web switch, a network security application, and a load balancing application (col. 1, lines 11-20 and col. 3, lines 36-42); and
- The second network application is a different network application selected from the group consisting of an intrusion detection application, a virus detection application, a load balancing application, a virtual private network application, a firewall application, a web switch, a network security application, a proxy application, and a database application (col. 1, lines 11-20 and col. 3, lines 36-42).

16. Regarding claim 9, in accordance with claim 1, Conklin et al. disclose the method further comprising:

- Receiving a first data packet via a first network interface includes determining a first data packet received network interface identifier based at least in part on receiving the first data packet via the first network interface (col. 7, lines 44-50); and
- Identifying a first network application of a plurality of network applications based at least in part on the first network interface includes identifying the first network application of the plurality of network applications based at least in part on the first data packet received network interface identifier (col. 7, lines 55-61).

17. Regarding claim 10, Conklin et al. disclose a method for directing units of data to network applications, the method comprising:

- Receiving a first unit of data, the first unit of data including a first service address and a first service port identifier (col. 7, lines 44-50);
- Identifying a first network application of a plurality of network applications based at least in part on the first service address and the first service port identifier, the plurality of network applications including a second network application, the first network application being different from the second network application (col. 7, lines 55-61); and
- Sending at least a portion of the first unit of data to the first network application (col. 7, lines 55-61).

18. Regarding claim 11, in accordance with claim 10, Conklin et al. disclose the method wherein:

- Receiving a first unit of data includes receiving the first unit of data via a first network interface (col. 7, lines 45-50); and
- Identifying a first network application of a plurality of network applications based at least in part on the first service address and the first service port identifier includes identifying the first network application of the plurality of network applications based at least in part on the first service address, the first service port identifier, and the first network interface (col. 7, lines 44-50, 55-61, and Fig. 9).

19. Regarding claim 12, in accordance with claim 10, Conklin et al. disclose the method wherein:

- The means for receiving a data packet includes:
 - Receiving the first unit of data via a first network interface (col. 7, lines 45-50), and
 - Determining a first unit of data received network interface identifier based at least in part on receiving the first unit of data via the first network interface (col. 3, lines 3-14); and
- Identifying a first network application of a plurality of network applications based at least in part on the first service address and the first service port identifier includes identifying the first network application of the plurality of network applications based at least in part on the first service address, the first service port identifier, and the first unit of data received network interface identifier (col. 7, lines 45-50 and 55-61).

20. Regarding claim 13, in accordance with claim 10, Conklin et al. disclose the method wherein the first network application is a first implementation of a particular network application and the second network application is a second implementation of a particular network application (see Fig. 9).

21. Regarding claim 14, in accordance with claim 13, Conklin et al. disclose the method wherein the particular network application is selected from the group consisting of an intrusion detection application, a virus detection application, a load balancing application, a virtual private network application, a firewall application, a web switch, a network security application, a proxy application, and a database application (col. 1, lines 11-20 and col. 3, lines 36-42).

22. Regarding claim 15, in accordance with claim 10, Conklin et al. disclose the method wherein identifying a first network application of a plurality of network applications based at least in part on the first service address and the first service port identifier includes:

- Accessing a database, the database including a plurality of records, each of at least a subset of the plurality of records (col. 4, line 52 – col. 5, line 9) including:
 - A service address field to store a service address (col. 4, lines 61-67), and
 - A plurality of packet direction entries, each of at least a subset of the plurality of packet direction entries corresponding to a network application of the plurality of network applications, each of at least the subset of the plurality of packet direction entries containing a service port identifier field to store a service port identifier (col. 4, lines 61-67);

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- Identifying a record of the at least a subset of the plurality of records based at least in part on the first service address (col. 4, line 52 – col. 5, line 9); and
- Identifying a packet direction entry of the identified record based at least in part on the first service port identifier, the identified packet direction entry corresponding to the first network application (col. 4, line 52 – col. 5, line 9).

23. Regarding claim 16, in accordance with claim 1, Conklin et al. disclose the method wherein:

- Identifying a record of the at least a subset of the plurality of records based at least in part on the first service address includes identifying a record containing a service address corresponding to the first service address (col. 4, line 52 – col. 5, line 9); and
- Identifying a packet direction entry of the identified record based at least in part on the first service port identifier includes identifying a packet direction entry containing a service port identifier corresponding to the first service port identifier (col. 4, line 52 – col. 5, line 9).

24. Regarding claim 17, in accordance with claim 1, Conklin et al. disclose the method wherein:

- Receiving a first unit of data includes:
 - Receiving the first unit of data via a first network interface (col. 7, lines 44-50), and

- Determining a first unit of data received via network interface identifier based at least in part on receiving the first unit of data via the first network interface (col. 7, lines 55-61); and
- Identifying a first network application of a plurality of network applications based at least in part on the first service address and the first service port identifier includes identifying the first network application based at least in part on the first service address, the first service port identifier, and the first unit of data received via network interface identifier (col. 7, lines 55-61).

25. Regarding claim 18, in accordance with claim 1, Conklin et al. disclose the method identifying the first network application based at least in part on the first service address, the first service port identifier, and the first unit of data received via network interface identifier includes:

- Each of at least the subset of the plurality of packet direction entries containing a unit of data received via network interface identifier field to store a unit of data received via network interface identifier (col. 4, lines 61-67); and
- Identifying the packet direction entry of the identified record based at least in part on the first unit of data received via interface identifier, the identified packet direction entry corresponding to the first network application (col. 4, lines 52-67).

26. Regarding claim 19, in accordance with claim 1, Conklin et al. disclose the method wherein each of at least the subset of the plurality of packet direction entries includes a send via network interface field to store a send via network interface identifier (col. 4, lines 61-67 and col. 3, lines 3-14).

27. Regarding claim 20, in accordance with claim 1, Conklin et al. disclose the method wherein each of at least the subset of the plurality of packet direction entries includes a source address field to store a source address (col. 3, lines 3-14).

28. Regarding claim 21, in accordance with claim 1, Conklin et al. disclose the method wherein each of at least the subset of the plurality of packet direction entries includes a destination logical address field to store a destination logical address (col. 3, lines 3-14).

29. Regarding claim 22, in accordance with claim 1, Conklin et al. disclose the method wherein each of at least the subset of the plurality of packet direction entries includes a network application send address field to store a network application send address (col. 3, lines 3-14).

30. Regarding claim 23, in accordance with claim 1, Conklin et al. disclose the method wherein the network application send address field to store a network application send address is a network application physical address field to store a network application physical address (col. 3, lines 3-14).

31. Regarding claim 24, in accordance with claim 1, Conklin et al. disclose the method wherein the network application physical address field to store a network application physical address is a network application media access controller address field to store a media access controller address (col. 2, line 64 – col. 3, line 14).

32. Regarding claim 25, in accordance with claim 1, Conklin et al. disclose the method wherein the network application send address field to store a network

application send address is a network application send logical address field to store a network application send logical address (col. 2, line 64 – col. 3, line 14).

33. Regarding claim 26, in accordance with claim 10, Conklin et al. disclose the method further comprising:

- Receiving a second unit of data, the second unit of data including a second service address and a second service port identifier (col. 7, lines 44-50);
- Identifying the second network application of a plurality of network applications based at least in part on the second service address and the second service port identifier (col. 3, lines 3-14); and
- Sending at least a portion of the second unit of data to the second network application (col. 7, lines 55-61).

34. Regarding claim 27, in accordance with claim 26, Conklin et al. disclose the method wherein:

- Sending at least a portion of the first unit of data to the first network application includes sending at least a portion of the first unit of data to the first network application via a second network interface, the second network interface being different from the first network interface (col. 7, lines 55-61); and
- Sending at least a portion of the second unit of data to the second network application includes sending at least a portion of the second unit of data to the second network application via the second network interface (col. 7, lines 55-61).

35. Regarding claim 28, Conklin et al. disclose a system for directing a data packet to a network application, the system comprising:

- A first network interface to receive a data packet, the data packet including a data packet service address (col. 7, lines 44-50);
- Packet direction logic, the packet direction logic coupled to the first network interface, the packet direction logic including a plurality of service definition records, each of at least a subset of the plurality of service definition records including:
 - A service address field to store a service address (col. 3, lines 3-14),
 - A plurality of packet direction entries, each of at least a subset of the plurality of packet direction entries corresponding to a network application, the plurality of packet direction entries including a first packet direction entry and a second packet direction entry, the first packet direction entry corresponding to a first network application, the second packet direction entry corresponding to a second network application, the first network application being different from the second network application (col. 4, lines 61-67 and Fig. 9), and
 - Each of at least the subset of the plurality of packet direction entries including a received via network interface field to store a received via network interface identifier (col. 3, lines 3-14 and col. 4, lines 61-67); and
- A second network interface to send at least a portion of the data packet to the first network application, the second network interface coupled to the packet direction logic, the second network interface being different from the first network interface (col. 7, lines 44-50 and fig. 9).

36. Regarding claim 29, in accordance with claim 28, Conklin et al. disclose the system wherein the first network application is a first version of a particular network application and the second network application is a second version of a particular network application (see Fig. 9).

37. Regarding claim 30, in accordance with claim 29, Conklin et al. disclose the system wherein the particular network application is selected from the group consisting of an intrusion detection application, a virus detection application, a firewall application, a web switch, a network security application, and a load balancing application (col. 1, lines 11-20 and col. 3, lines 36-42).

38. Regarding claim 31, in accordance with claim 28, Conklin et al. disclose the system wherein:

- The first network application is selected from the group consisting of an intrusion detection application, a virus detection application, a firewall application, a web switch, a network security application, and a load balancing application (col. 1, lines 11-20 and col. 3, lines 36-42); and
- The second network application is a different network application selected from the group consisting of an intrusion detection application, a virus detection application, a load balancing application, a virtual private network application, a firewall application, a web switch, a network security application, a proxy application, and a database application (col. 1, lines 11-20 and col. 3, lines 36-42).

39. Regarding claim 32, in accordance with claim 28, Conklin et al. disclose the system wherein:

- The data packet includes a data packet service port identifier (col. 3, lines 3-14); and
- Each of at least the subset of the plurality of packet direction entries includes a service port identifier field to store a service port identifier (col. 3, lines 3-14 and col. 4, lines 61-67).

40. Regarding claim 33, in accordance with claim 28, Conklin et al. disclose the system wherein each of at least the subset of the plurality of packet direction entries includes a send via network interface field to store a send via network interface identifier (col. 4, lines 61-67).

41. Regarding claim 34, in accordance with claim 28, Conklin et al. disclose wherein each of at least the subset of the plurality of packet direction entries includes a source address field to store a source address (col. 3, lines 3-14).

42. Regarding claim 35, in accordance with claim 28, Conklin et al. disclose the system wherein each of at least the subset of the plurality of packet direction entries includes a destination logical address field to store a destination logical address (col. 3, lines 3-14).

43. Regarding claim 36, in accordance with claim 28, Conklin et al. disclose the system wherein each of at least the subset of the plurality of packet direction entries includes a network application send address field to store a network application send address (col. 3, lines 3-14).

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44. Regarding claim 37, in accordance with claim 36, Conklin et al. disclose the system wherein the network application send address field to store a network application send address is a network application physical address field to store a network application physical address (col. 2, line 64 – col. 3, line 14).

45. Regarding claim 38, in accordance with claim 37, Conklin et al. disclose the system wherein the network application physical address field to store a network application physical address is a network application media access controller address field to store a media access controller address (col. 2, line 64 – col. 3, line 14).

46. Regarding claim 39, in accordance with claim 36, Conklin et al. disclose the system wherein the network application send address field to store a network application send address is a network application send logical address field to store a network application send logical address (col. 3, lines 3-14).

47. Regarding claim 40, in accordance with claim 28, Conklin et al. disclose the system wherein:

- The data packet contains a data packet service port identifier (col. 3, lines 3-14);
and
- Each of at least a subset of the plurality of packet direction entries includes
 - A service port identifier field to store a service port identifier (col. 3, lines 3-14),
 - A send via network interface field to store a send via network interface identifier (col. 3, lines 3-14),
 - A source address field to store a source address (col. 3, lines 3-14),

- A destination logical address field to store a destination logical address (col. 3, lines 3-14), and
- A network application send address field to store a network application send address (col. 3, lines 3-14).

48. Regarding claim 41, in accordance with claim 28, Conklin et al. disclose the system wherein the data packet uses one or more protocols from one of a TCP/IP network protocol suite and a UDP/IP network protocol suite (see Fig. 5, col. 2, line 64 – col. 3, line 14).

49. Regarding claim 42, in accordance with claim 41, Conklin et al. disclose the system wherein the one or more protocols includes an IPv4 network protocol (see Fig. 5, col. 2, line 64 – col. 3, line 14).

50. Regarding claim 43, in accordance with claim 41, Conklin et al. disclose the system wherein the one or more protocols includes an IPv6 network protocol (see Fig. 5, col. 2, line 64 – col. 3, line 14).

51. Regarding claim 44, in accordance with claim 28, Conklin et al. disclose the system wherein the data packet uses one or more of a layer 2 protocol, a layer 3 protocol, and a layer 4 protocol (see Fig. 5, col. 2, line 64 – col. 3, line 14).

52. Regarding claim 45, in accordance with claim 44, Conklin et al. disclose the system wherein the layer 2 protocol is selected from the group consisting of ATM and frame relay (see Fig. 5, col. 2, line 64 – col. 3, line 14).

53. Regarding claim 46, in accordance with claim 44, Conklin et al. disclose the system wherein the layer 3 protocol is MPLS (see Fig. 5, col. 2, line 64 – col. 3, line 14).

54. Regarding claim 47, in accordance with claim 28, Conklin et al. disclose the system wherein the packet direction logic lacks information that supports stateful processing (see Fig. 5, col. 2, line 64 – col. 3, line 14).

55. Regarding claim 48, in accordance with claim 28, Conklin et al. disclose the system wherein the packet direction logic includes information that supports stateful processing (see Fig. 5, col. 2, line 64 – col. 3, line 14).

56. Regarding claim 49, in accordance with claim 28, Conklin et al. disclose the system wherein the packet direction logic consists essentially of information that supports stateless processing (see Fig. 5, col. 2, line 64 – col. 3, line 14).

57. Regarding claim 50, Conklin et al. disclose the system for directing a data packet, the system comprising:

- Means for receiving the data packet, the data packet including a data packet service address and a data packet service port identifier (col. 3, lines 3-14 and col. 7, lines 45-50);
- Means for identifying a first network application of a plurality of network applications based at least in part on the data packet service address and the data packet service port identifier, the plurality of network applications including at least the first network application and a second network application, the first network application being different from the second network application (col. 7, lines 55-61); and
- Means for sending at least a portion of the data packet to the first network application (col. 7, lines 55-61).

58. Regarding claim 51, in accordance with claim 50, Conklin et al. disclose the system wherein:

- The means for receiving a data packet includes means for receiving a data packet via a first network interface (col. 7, lines 45-50).
- The means for identifying a first network application of a plurality of network applications based at least in part on the data packet service address and the data packet service port identifier includes means for identifying the first network application of the plurality of network applications based at least in part on the data packet service address, the data packet service port identifier, and receiving the data packet via the first network interface (col. 7, lines 44-50 and lines 55-61, and Fig. 9); and
- The means for sending at least a portion of the data packet to the first network application includes means for sending at least a portion of the data packet to the first network application via a second network interface, the second network interface being different from the first network interface (col. 7, lines 44-50 and lines 55-61, and Fig. 9).

59. Regarding claim 52, in accordance with claim 50, Conklin et al. disclose the system wherein:

- The means for receiving a data packet includes:
 - Means for receiving the data packet via a first network interface (col. 7, lines 45-50), and

- Means for determining a data packet received network interface identifier based at least in part on receiving the data packet via the first network interface (col. 3, lines 3-14); and
- The means for identifying a first network application of a plurality of network applications based at least in part on the data packet service address and the data packet service port identifier includes means for identifying the first network application of the plurality of network applications based at least in part on the data packet service address, the data packet service port identifier, and the data packet received network interface identifier (col. 7, lines 45-50 and 55-61).

60. Regarding claim 53, in accordance with claim 50, Conklin et al. disclose the system wherein the first network application is a first implementation of a particular network application and the second network application is a second implementation of a particular network application (see Fig. 9).

61. Regarding claim 54, in accordance with claim 53, Conklin et al. disclose the system wherein the particular network application is selected from the group consisting of an intrusion detection application, a virus detection application, a load balancing application, a virtual private network application, a firewall application, a web switch, a network security application, a proxy application, and a database application (col. 1, lines 11-20 and col. 3, lines 36-42).

62. Regarding claim 55, Conklin et al. disclose a process for directing a data packet, the process comprising:

- A step for receiving the data packet, the data packet including a data packet service address and a data packet service port identifier (col. 7, lines 45-50 and col. 3, lines 3-14);
- A step for identifying a first network application of a plurality of network applications based at least in part on the data packet service address and the data packet service port identifier, the plurality of network applications including at least the first network application and a second network application, the first network application being different from the second network application (col. 7, lines 55-61); and
- A step for sending at least a portion of the data packet to the first network application (col. 7, lines 55-61).

63. Regarding claim 56, in accordance with claim 55, Conklin et al. disclose a process wherein:

- The step for receiving a data packet includes a step for receiving the data packet via a first network interface (col. 7, lines 45-50);
- The step for identifying a first network application of a plurality of network applications based at least in part on the data packet service address and the data packet service port identifier includes a step for identifying the first network application of the plurality of network applications based at least in part on the data packet service address, the data packet service port identifier, and receiving the data packet via the first network interface (col. 7, lines 44-50 and 55-61, see Fig. 9); and

- The step for sending at least a portion of the data packet to the first network application includes a step for sending at least a portion of the data packet to the first network application via a second network interface, the second network interface being different from the first network interface (col. 7, lines 44-50 and lines 55-61, see Fig. 9).

64. Regarding claim 57, in accordance with claim 55, Conklin et al. disclose a process wherein:

- The step for receiving a data packet includes
 - a step for receiving the data packet via a first network interface (col. 7, lines 45-50), and
 - a step for determining a data packet received network interface identifier based at least in part on receiving the data packet via the first network interface (col. 3, lines 3-14); and
- The step for identifying a first network application of a plurality of network applications based at least in part on the data packet service address and the data packet service port identifier includes a step for identifying the first network application of the plurality of network applications based at least in part on the data packet service address, the data packet service port identifier, and the data packet received network interface identifier (col. 7, lines 45-50 and 55-61).

65. Regarding claim 58, in accordance with claim 55, Conklin et al. disclose a process the first network application is a first version of a particular network application

and the second network application is a second version of a particular network application (see Fig. 9).

66. Regarding claim 59, in accordance with claim 58, Conklin et al. disclose a process the particular network application is selected from the group consisting of an intrusion detection application, a virus detection application, a load balancing application, a virtual private network application, a firewall application, a web switch, a network security application, a proxy application, and a database application (col. 1, lines 11-20 and col. 3, lines 36-42).

67. Regarding claim 60, Conklin et al. disclose a computer-readable medium storing a plurality of instructions to be executed by a processor for directing a packet, the plurality of instructions comprising instructions to:

- Receive a data packet, the data packet including a data packet service address and a data packet service port identifier (col. 7, lines 45-50 and col. 3, lines 3-14);
- Identify a first network application of a plurality of network applications based at least in part on the data packet service address and the data packet service port identifier, the plurality of network applications including at least the first network application and a second network application, the first network application being different from the second network application (col. 7, lines 55-61); and
- Send at least a portion of the data packet to the first network application (col. 7, lines 55-61).

68. Regarding claim 61, in accordance with claim 60, Conklin et al. disclose the computer-readable medium wherein:

- The instructions to receive a data packet include instructions to receive the data packet via a first network interface (col. 7, lines 45-50);
- The instructions to identify a first network application of a plurality of network applications based at least in part on the data packet service address and the data packet service port identifier include instructions to identify the first network application of the plurality of network applications based at least in part on the data packet service address, the data packet service port identifier, and receiving the data packet via the first network interface (col. 7, lines 44-50 and 55-61, see Fig. 9); and
- The instructions to send at least a portion of the data packet to the first network application include instructions to send at least a portion of the data packet to the first network application via a second network interface, the second network interface being different from the first network interface (col. 7, lines 44-50 and 55-61, see Fig. 9).

69. Regarding claim 62, in accordance with claim 60, Conklin et al. disclose the computer-readable medium wherein:

- The instructions to receive a data packet include instructions to
 - Receive the data packet via a first network interface (col. 7, lines 45-50),
 - and

- Determine a data packet received network interface identifier based at least in part on receiving the data packet via the first network interface (col. 3, lines 3-14); and
- The instructions to identify a first network application of a plurality of network applications based at least in part on the data packet service address and the data packet service port identifier include instructions to identify the first network application of the plurality of network applications based at least in part on the data packet service address, the data packet service port identifier, and the data packet received network interface identifier (col. 7, lines 45-50 and 55-61).

70. Regarding claim 63, in accordance with claim 60, Conklin et al. disclose the computer-readable medium wherein the first network application is a first implementation of a particular network application and the second network application is a second implementation of a particular network application (see Fig. 9).

71. Regarding claim 64, in accordance with claim 63, Conklin et al. disclose the computer-readable medium wherein the particular network application is selected from the group consisting of an intrusion detection application, a virus detection application, a load balancing application, a virtual private network application, a firewall application, a web switch, a network security application, a proxy application, and a database application (col. 1, lines 11-20 and col. 3, lines 36-42).

Conclusion

72. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gleichauf et al. (U.S. 6,499,107) disclose a method and system for adaptive network security using intelligent packet analysis.

Shanklin et al. (U.S. 6,578,147) disclose parallel intrusion detection sensors with load balancing for high-speed networks.

Lyon et al. (U.S. 5,920,705) disclose a method and apparatus for dynamically shifting between routing and switching packets in a transmission network.

Kalajan (U.S. 6,304,908) discloses a mechanism for delivering a message based upon a source address.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes, whose telephone number is (571)272-3899. The examiner can normally be reached on Monday-Friday (7:30-5).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached at (571)272-3896. The fax phone number for the organization where this application or proceeding is assigned is (703)872-3906.

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Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [benjamin.ailles@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Benjamin Ailes
Patent Examiner
Art Unit 2142


JACK B. HARVEY
SUPERVISOR, PATENT EXAMINER